

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	F	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,728	10/511,728 01/19/2005		Jeppe Bastholm	66383-033-7	2568
25269	7590	12/13/2005		EXAM	INER
DYKEMA (GOSSET	T PLLC	MILLER, PATRICK L		
FRANKLIN	SQUARE	E, THIRD FLOOR W			
1300 I STRE	ET, NW		ART UNIT	PAPER NUMBER	
WASHINGT	ON DC	20005	2837		

DATE MAILED: 12/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<u> </u>		AK
,	Application No.	Applicant(s)
	10/511,728	BASTHOLM, JEPPE
Office Action Summary	Examiner	Art Unit
	Patrick Miller	2837
The MAILING DATE of this communication a Period for Reply	ppears on the cover sheet with	the correspondence address
A SHORTENED STATUTORY PERIOD FOR REF WHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory perions. Failure to reply within the set or extended period for reply will, by state that the period for reply will, by state that the mail of the period by the Office later than three months after the mail of the patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATION 1.136(a). In no event, however, may a report will apply and will expire SIX (6) MONTHUTE, cause the application to become ABAI	ATION. ly be timely filed AS from the mailing date of this communication. NDONED (35 U.S.C. § 133).
Status		
1) Responsive to communication(s) filed on 2a) This action is FINAL. 2b) The second triangle of th	nis action is non-final. vance except for formal matter	•
Disposition of Claims		
4) ☐ Claim(s) 1-6 is/are pending in the application 4a) Of the above claim(s) is/are withd 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-6 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and	rawn from consideration.	
Application Papers		
9) ☑ The specification is objected to by the Exami 10) ☑ The drawing(s) filed on 19 October 2004 is/a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correction. 11) ☐ The oath or declaration is objected to by the	re: a)⊠ accepted or b)⊡ obj ne drawing(s) be held in abeyanc ection is required if the drawing(s	e. See 37 CFR 1.85(a).) is objected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) ⊠ Acknowledgment is made of a claim for forei a) ⊠ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority docume 2. ☐ Certified copies of the priority docume 3. ☒ Copies of the certified copies of the priority docume application from the International Bure * See the attached detailed Office action for a life	ents have been received. ents have been received in Aprionity documents have been re eau (PCT Rule 17.2(a)).	plication No eceived in this National Stage
Attachment(s)		
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0 Paper No(s)/Mail Date <u>03232005</u>. 	Paper No(s)/	mmary (PTO-413) Mail Date ormal Patent Application (PTO-152)

Application/Control Number: 10/511,728

Art Unit: 2837

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: In the Brief Description of the Drawings section, please "separate" the figures for Figure 1. I.e., make a separate description for Figures 1a, 1b, and 1c. Appropriate correction is required.

Claim Objections

- Claims 1-6 are objected to because of the following informalities: see bullet(s) below.
 Appropriate correction is required.
 - Claim 1 recites, "preferably an actuator" (l. 1). Either the claim requires an actuator or not.
 - Claim 1 recites, "characterized in that it" (1. 9). Remove this term and clarify to what "it" refers.
 - Claim 1 recites, "adapted to remove" (l. 11). Replace with "that removes."
 - Claim 2 recites, "characterized in that." Change to "where the second control is performed..."
 - Claim 2 recites, "the second control is performed by the following two steps, viz."
 Replace the claim with "[a] drive unit according to claim 1, where the second control comprises, a forward step..."
 - Claim 2 recites, "may be" (1. 3). Change to "is."
 - Claim 2 recites, "may be" (l. 9). Change to "is."
 - Claim 2 recites, "may be" (two occurrences, lines 3 and 4, respectively). Change to "is."

Page 2

Application/Control Number: 10/511,728

Art Unit: 2837

• Claim 3 recites in the preamble recites, "[a] power supply according to claim 2." Neither claim 1 nor claim 2 recites that the power supply has a

Page 3

- In claim 3, for clarify, replace the multiplication "dot" with an asterisk.
- Claim 5 recites, "including actuators." Recite this limitation positively.
- Claim 5 recites, "characterized in that" (l. 7). Replace with "where."
- Claim 5 recites, "adapted to remove" (1. 9). Replace with "that removes."
- Claim 6 recites, "in particular an article of furniture." Recite this limitation positively.
- Claim 6 recites, "characterized in that" (l. 6). Replace with where."
- Claim 6 recites, "which may be" (l. 2). Replace with "that is."
- Claim 6 recites, "adapted to remove" (1. 9). Replace with "that removes."

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 3. Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
 - Claims 1, 5, and 6 recite long and short periods of time, respectively. These terms are indefinite because the times are not referenced to anything.
 - Claim 2 describes that the control unit comprises a second control. Claims 3 and 4
 describe the power supply performing the forward step (of the second control). It is
 unclear whether the applicant intends the power converting unit in the drive unit to
 perform the second step or the drive unit. Please clarify.

Art Unit: 2837

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 4. Claims 1, 5, and 6 are rejected under 35 U.S.C. 102(e) as being anticipated by Bastholm et al. (6,509,705). The applied reference has a common assignee (and inventor) with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.
 - With respect to claim 1, Bastholm et al. discloses a drive unit for an actuator that drives a movable member (including an article of furniture) (col. 1, ll. 3-9) comprising a dc motor having a rotor consisting of a plurality of coils connected to a commutator in connection with a set of brushes (col. 1, ll. 3-5; inherent that a dc motor has a rotor with coils and a commutator that contacts brushes); a transmission that uses the motor to drive an adjustment means that adjusts an adjustable element (col. 4, ll. 62-65); a power supply that supplies power to the drive unit, where the power supply comprises a transformer having a primary side connected to an ac source (col. 1, ll. 6-7), and a secondary side having a recitification and smoothing means for connection to the dc motor (col. 1, ll. 7-

Application/Control Number: 10/511,728 Page 5

Art Unit: 2837

9); the drive unit comprises a first control to compensate for loss in the motor, thereby keeping the motor at a constant speed (cols. ¾, Il. 58-67/1-13; current feedback reduces power loss and keeps motor speed constant); and the drive unit also comprises a second control that removes voltage ripple, also keeping the motor at a constant speed (col. 3, Il. 35-45; tapping current reduces voltage ripple; reduced power loss means the motor can stay at a constant speed).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bastholm et al. as applied to claim 1 above, and further in view of Weimer et al. (5,982,156).
 - Bastholm et al. does not disclose the forward and power steps as claimed.
 - Weimer discloses a converter that uses forward step where the duty cycle is expressed in terms of a constant and the input voltage (cols. 11/12, Il. 20-67/1-49; Vref is the constant and V1 is the input voltage; therefore, arranging equation 4 around gets the relationship); a power step where the output voltage is expressed by the input voltage and the duty cycle (equation 5); and the forward step and the power step result in the output voltage being equal to the constant (equations 6 and 1 allow the output voltage to equal the constant Vref). The motivation to implement the forward and power steps is to reduce the effects of transients (cols. 34, Il. 66-67/1-3).

Application/Control Number: 10/511,728 Page 6

Art Unit: 2837

• Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to implement the converter of Weimer et al. into the Bastholm et al. circuit, thereby providing the advantage of reducing transients, as taught by Weimer et al.

Allowable Subject Matter

- 6. Claims 3 and 4 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
 - With respect to claims 3 and 4, the Prior Art does not disclose the specific relationship between the variables and constant as claimed.
- 7. Claims 3 and 4 would be allowable if rewritten to overcome the rejection(s) under 35
 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Application/Control Number: 10/511,728

Art Unit: 2837

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick Miller whose telephone number is 571-272-2070. The examiner can normally be reached on M-F, 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Martin can be reached on 571-272-2800 ext 41. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9318.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-3431.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patrick Miller Examiner

Art Unit 2837

pm

December 5, 2005

MARLONT. FLETCHER
PRIMARY EXAMINED

Page 7